

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P158509

Luminaire Tested: **VST-E11-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P158509
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33713)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E11-LED-E-U-SL3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (231) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30310 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 269.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



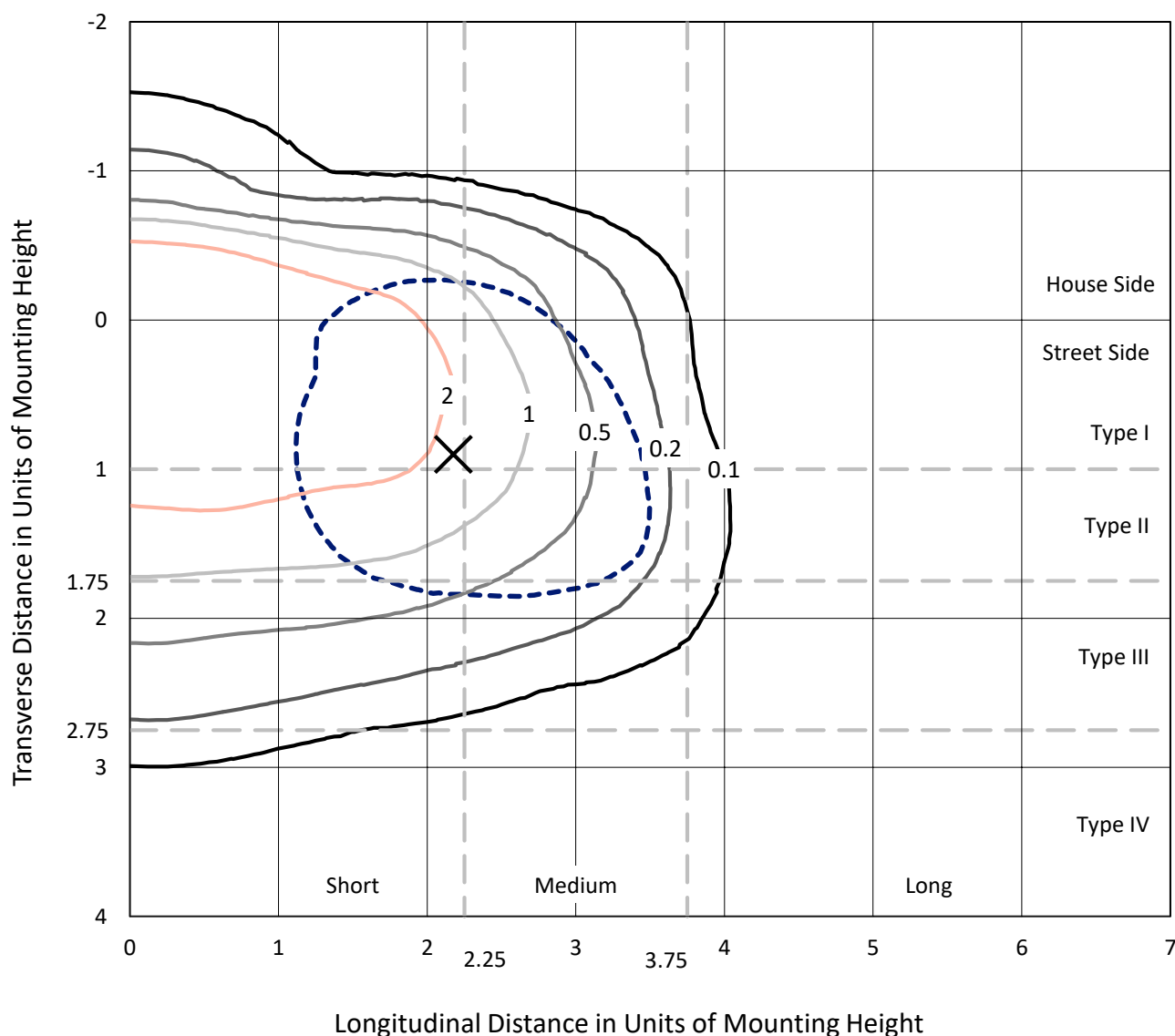
REPORT NUMBER: P158509

CATALOG NUMBER: VST-E11-LED-E-U-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

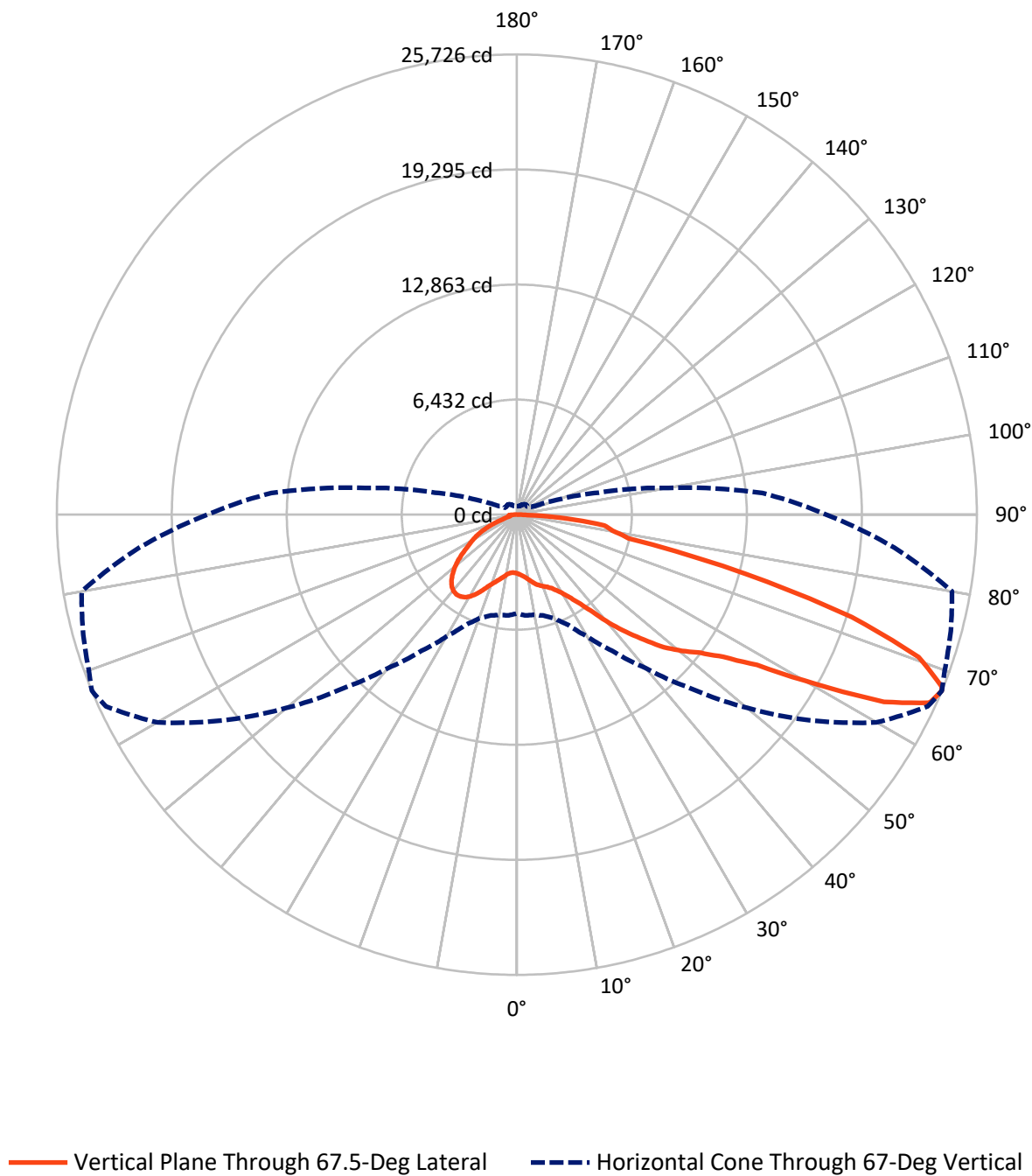


Based on 30 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P158509

CATALOG NUMBER: VST-E11-LED-E-U-SL3-7030

Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7271.4	0.0	7271.4
	% Fixture	24.0	0.0	24.0
Street Side	Lumens	23038.6	0.0	23038.6
	% Fixture	76.0	0.0	76.0
Total	Lumens	30310.0	0.0	30310.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.5	1.1
10°-20°	1112.5	3.7
20°-30°	1986.1	6.6
30°-40°	2910.7	9.6
40°-50°	4497.5	14.8
50°-60°	6549.1	21.6
60°-70°	8531.3	28.1
70°-80°	3818.9	12.6
80°-90°	577.4	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	30310.0	100.0
0°-180°	30310.0	100.0

Coefficient of Utilization



REPORT NUMBER: P158509

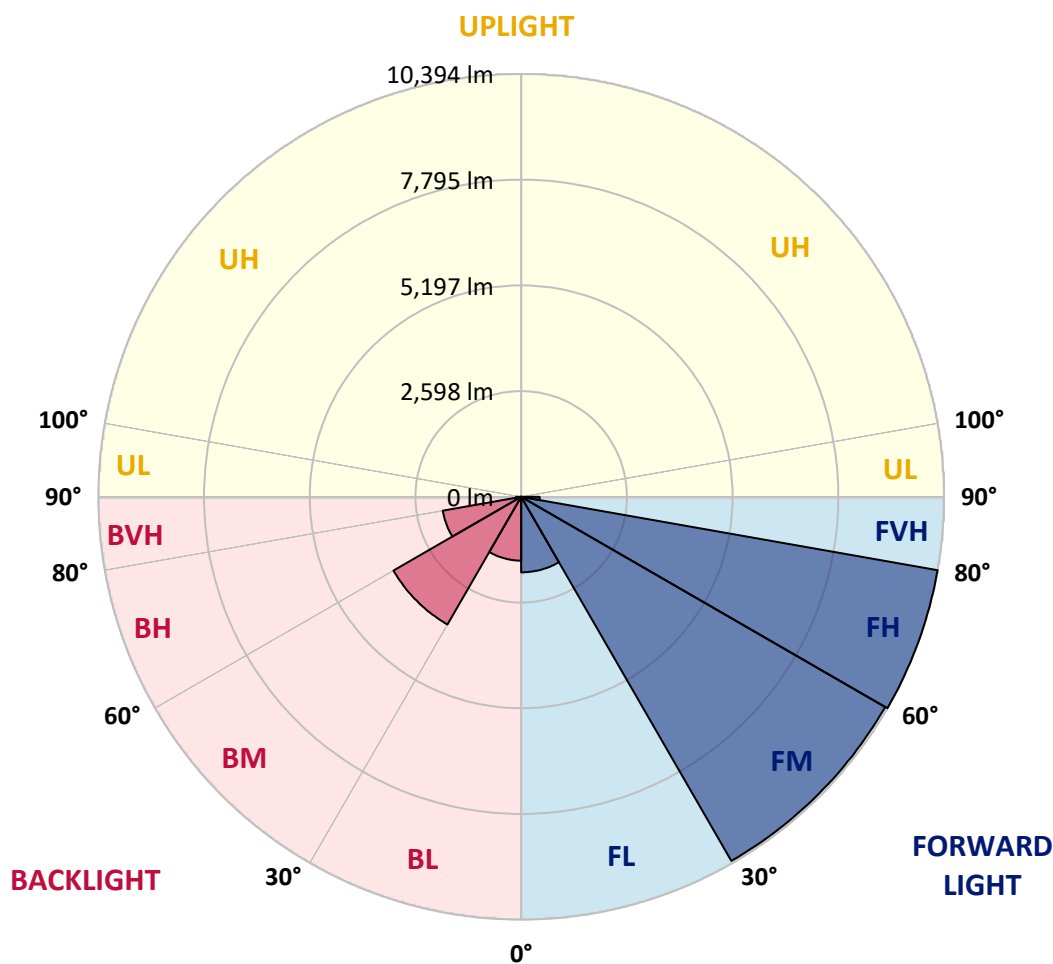
CATALOG NUMBER: VST-E11-LED-E-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1857.1	6.1			
FM	(30°-60°)	10334.1	34.1			
FH	(60°-80°)	10393.9	34.3			G4/12000
FVH	(80°-90°)	453.4	1.5			G3/500
BL	(0°-30°)	1568.0	5.2	B3/2500		
BM	(30°-60°)	3623.2	12.0	B3/5000		
BH	(60°-80°)	1956.3	6.5	B3/2500		G3/2500
BVH	(80°-90°)	124.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





REPORT NUMBER: P158509

CATALOG NUMBER: VST-E11-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3
2.5°	3413.9	3422.0	3424.0	3422.0	3424.0	3415.9	3413.9	3401.9	3407.9	3391.8	3387.8
5°	3598.8	3604.8	3608.8	3592.8	3596.8	3588.7	3578.7	3566.6	3550.6	3528.5	3514.4
7.5°	3779.6	3789.7	3787.7	3781.6	3767.6	3759.5	3739.4	3721.4	3693.2	3667.1	3649.0
10°	4022.8	4020.8	4020.8	3986.6	3966.5	3948.4	3912.2	3884.1	3856.0	3817.8	3797.7
12.5°	4304.1	4290.0	4284.0	4259.9	4217.7	4185.5	4133.3	4079.0	4028.8	3988.6	3956.5
15°	4575.3	4575.3	4559.3	4521.1	4480.9	4438.7	4364.4	4286.0	4203.6	4139.3	4107.2
17.5°	4822.5	4800.4	4786.3	4736.1	4693.9	4625.6	4543.2	4458.8	4356.3	4265.9	4203.6
20°	5003.3	4985.2	4955.1	4892.8	4820.5	4740.1	4643.7	4545.2	4434.7	4336.2	4265.9
22.5°	5107.8	5085.7	5039.5	4957.1	4858.7	4746.1	4633.6	4541.2	4440.7	4366.4	4308.1
25°	5162.1	5140.0	5077.7	4969.2	4836.6	4687.9	4559.3	4468.8	4410.6	4392.5	4384.4
27.5°	5160.1	5142.0	5075.7	4951.1	4780.3	4609.5	4470.8	4394.5	4388.5	4458.8	4511.0
30°	5107.8	5095.8	5035.5	4910.9	4732.1	4553.2	4424.6	4384.4	4446.7	4595.4	4724.0
32.5°	5055.6	5049.5	5007.4	4894.8	4742.1	4591.4	4503.0	4507.0	4635.6	4864.7	5071.7
35°	5061.6	5069.6	5063.6	5003.3	4906.9	4828.5	4786.3	4874.7	5075.7	5353.0	5630.3
37.5°	5113.8	5144.0	5182.2	5188.2	5190.2	5178.1	5266.6	5453.4	5746.8	6108.5	6542.5
40°	5228.4	5262.5	5373.1	5469.5	5594.1	5742.8	5921.6	6180.8	6544.5	6990.6	7523.1
42.5°	5584.0	5632.3	5768.9	5947.7	6176.8	6409.9	6677.1	7030.8	7476.9	7947.1	8505.7
45°	6048.2	6148.7	6299.4	6498.3	6841.9	7169.4	7515.0	7910.9	8385.1	8973.8	9536.5
47.5°	6626.9	6727.4	6946.4	7159.4	7565.3	7973.2	8350.9	8764.9	9279.3	9882.1	10505.0
50°	7133.3	7247.8	7442.7	7730.0	8200.2	8700.6	9118.5	9566.6	9998.6	10633.6	11262.5
52.5°	7531.1	7613.5	7800.4	8063.6	8588.1	9136.6	9665.1	10163.4	10675.8	11310.7	11893.5
55°	7581.4	7657.7	7840.6	8142.0	8674.5	9283.3	9892.1	10482.9	11208.3	11901.5	12673.1
57.5°	7364.3	7426.6	7611.5	7880.8	8399.2	9092.4	9862.0	10619.5	11547.9	12484.2	13426.6
60°	7056.9	7119.2	7263.9	7478.9	7947.1	8694.5	9592.7	10629.6	11863.3	13215.6	14602.1
62.5°	6719.3	6773.6	6890.1	7042.8	7454.8	8144.0	9172.8	10563.3	12120.5	13943.0	16081.0
65°	6150.7	6281.3	6331.5	6488.3	6900.2	7551.2	8598.1	10115.2	12016.0	14266.5	17009.3
67°	5521.8	5654.4	5680.5	5839.2	6168.8	6793.7	7858.6	9285.3	11188.2	13707.9	16804.4
67.5°	5320.8	5433.3	5473.5	5632.3	5943.7	6532.5	7543.2	8985.9	10935.0	13402.5	16557.2
70°	3912.2	4036.8	4081.0	4147.3	4370.4	4860.7	5529.8	6781.6	8718.7	10937.0	13967.1
72.5°	2093.8	2194.2	2236.4	2334.9	2449.4	2716.7	3229.1	4127.2	5351.0	7318.1	9936.3
75°	1416.6	1456.8	1486.9	1555.3	1673.8	1886.8	2111.8	2427.3	3166.8	4129.3	5654.4
77.5°	807.8	825.9	829.9	841.9	936.4	1139.3	1509.0	2043.5	2620.2	2992.0	3616.9
80°	349.6	385.8	413.9	395.8	389.8	432.0	540.5	805.8	1579.4	2507.7	2975.9
82.5°	188.9	205.0	229.1	231.1	243.1	257.2	279.3	331.5	466.2	940.4	2051.6
85°	98.5	102.5	136.6	156.7	166.8	174.8	178.8	198.9	229.1	291.4	510.4
87.5°	14.1	20.1	24.1	32.1	36.2	38.2	44.2	56.3	66.3	80.4	136.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158509

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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3
2.5°	3369.7	3365.7	3353.6	3345.6	3337.6	3329.5	3319.5	3311.4	3297.4	3287.3	3275.3
5°	3494.3	3470.2	3454.1	3432.0	3428.0	3401.9	3375.7	3363.7	3339.6	3319.5	3295.4
7.5°	3620.9	3592.8	3566.6	3548.5	3538.5	3502.3	3476.2	3446.1	3417.9	3391.8	3363.7
10°	3769.6	3741.4	3713.3	3701.3	3683.2	3649.0	3626.9	3588.7	3560.6	3528.5	3490.3
12.5°	3924.3	3904.2	3884.1	3868.0	3860.0	3843.9	3811.8	3779.6	3741.4	3709.3	3665.1
15°	4060.9	4046.9	4038.8	4034.8	4034.8	4024.8	3994.6	3964.5	3924.3	3888.1	3839.9
17.5°	4157.4	4151.4	4157.4	4163.4	4171.5	4163.4	4157.4	4123.2	4097.1	4052.9	4004.7
20°	4213.7	4225.7	4255.8	4275.9	4294.0	4308.1	4314.1	4286.0	4251.8	4219.7	4187.5
22.5°	4273.9	4308.1	4360.3	4390.5	4420.6	4470.8	4482.9	4462.8	4436.7	4416.6	4382.4
25°	4374.4	4424.6	4515.1	4563.3	4605.5	4679.8	4689.9	4693.9	4687.9	4671.8	4629.6
27.5°	4531.1	4629.6	4750.2	4812.4	4858.7	4955.1	4993.3	4993.3	4977.2	4995.3	4995.3
30°	4804.4	4935.0	5091.7	5127.9	5200.3	5284.6	5346.9	5355.0	5357.0	5395.2	5451.4
32.5°	5224.4	5348.9	5523.8	5563.9	5626.2	5706.6	5776.9	5768.9	5787.0	5869.4	5943.7
35°	5835.2	5961.8	6076.3	6130.6	6158.7	6231.1	6257.2	6301.4	6355.6	6458.1	6448.1
37.5°	6739.4	6852.0	6868.0	6902.2	6868.0	6882.1	6902.2	6954.4	7099.1	7191.5	7042.8
40°	7828.5	8015.4	7997.3	7957.1	7880.8	7778.3	7814.4	7894.8	8051.5	7971.2	7571.3
42.5°	8855.3	9048.2	9012.0	8965.8	8797.0	8758.8	8754.8	8821.1	8905.5	8676.5	7985.2
45°	9866.0	10062.9	10000.6	9974.5	9862.0	9779.6	9847.9	9851.9	9829.8	9339.6	8346.9
47.5°	10908.9	11089.7	11049.5	11071.6	10955.1	10900.8	10906.9	10878.7	10671.8	9902.2	8628.2
50°	11750.8	11993.9	12018.0	11967.8	11905.5	11823.1	12034.1	11957.8	11497.6	10448.7	8899.5
52.5°	12405.9	12733.4	12858.0	12825.8	12775.6	12785.6	13181.5	13267.9	12506.3	11137.9	9198.9
55°	13181.5	13697.9	13900.8	14021.4	13969.1	14170.1	15076.3	15120.5	13908.9	12038.1	9588.7
57.5°	14300.7	15040.1	15681.1	15851.9	16016.7	16669.7	18140.6	17692.5	15729.4	13400.5	10083.0
60°	16002.6	17622.2	18663.0	19209.6	19595.4	20507.6	21906.2	20770.9	17997.9	15022.1	10703.9
62.5°	18385.7	20752.8	22492.9	23041.5	23200.2	23724.6	24737.4	22565.2	19233.7	15749.4	10758.2
65°	20160.0	22999.3	25083.0	25364.3	25175.4	25185.5	25450.7	22470.8	18773.6	15114.5	9825.8
67°	20043.5	23222.3	25356.2	25726.0	25464.8	25121.2	24707.2	21190.8	17294.7	13784.3	8604.1
67.5°	19864.6	23007.3	25237.7	25627.5	25388.4	24996.6	24391.8	20694.5	16834.5	13370.4	8355.0
70°	17172.1	20292.6	23296.6	23845.2	23945.7	23588.0	21890.1	17449.4	13667.7	10876.7	6488.3
72.5°	13366.3	16145.3	19117.2	19593.4	19979.2	18948.4	15932.3	12052.2	9962.5	7838.6	4697.9
75°	8825.2	11652.3	13151.3	13221.7	12729.4	10820.5	7784.3	6036.1	5555.9	4607.5	2907.6
77.5°	4722.0	6852.0	6894.2	6383.8	6150.7	4585.4	1860.7	1026.8	1143.3	1298.1	1157.4
80°	3522.4	4364.4	5057.6	5437.4	5549.9	3932.3	962.5	544.5	476.2	434.0	428.0
82.5°	3176.8	4215.7	4726.0	4933.0	4880.8	3235.1	540.5	365.7	303.4	329.5	375.8
85°	1245.8	2250.5	2959.8	2865.4	2407.2	1205.6	295.4	196.9	196.9	285.3	369.7
87.5°	255.2	462.2	626.9	598.8	538.5	233.1	144.7	118.6	120.6	231.1	349.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3	3285.3
2.5°	3263.2	3251.2	3243.1	3235.1	3227.0	3223.0	3217.0	3217.0	3204.9	3200.9	3196.9
5°	3277.3	3257.2	3243.1	3225.0	3211.0	3198.9	3182.8	3178.8	3164.8	3154.7	3150.7
7.5°	3337.6	3307.4	3277.3	3255.2	3235.1	3209.0	3190.9	3174.8	3160.7	3150.7	3138.6
10°	3452.1	3419.9	3377.8	3337.6	3311.4	3271.3	3243.1	3215.0	3198.9	3186.9	3170.8
12.5°	3620.9	3574.7	3524.4	3476.2	3432.0	3379.8	3351.6	3317.5	3297.4	3287.3	3275.3
15°	3793.7	3743.5	3681.2	3635.0	3584.7	3544.5	3518.4	3488.3	3472.2	3460.1	3452.1
17.5°	3970.5	3912.2	3868.0	3821.8	3797.7	3767.6	3733.4	3695.2	3649.0	3620.9	3582.7
20°	4151.4	4107.2	4081.0	4054.9	4026.8	3984.6	3916.3	3837.9	3751.5	3669.1	3590.7
22.5°	4362.3	4336.2	4332.2	4308.1	4249.8	4149.4	4022.8	3876.1	3729.4	3592.8	3486.3
25°	4659.7	4659.7	4639.6	4541.2	4404.5	4223.7	4010.7	3799.7	3604.8	3417.9	3277.3
27.5°	5033.5	5019.4	4920.9	4718.0	4472.9	4191.5	3906.2	3639.0	3389.8	3184.9	3004.0
30°	5445.4	5346.9	5136.0	4816.5	4448.7	4087.1	3737.4	3428.0	3134.6	2883.4	2670.5
32.5°	5873.4	5634.3	5254.5	4816.5	4364.4	3930.3	3526.4	3146.7	2811.1	2529.8	2276.6
35°	6261.2	5825.2	5282.6	4738.1	4199.6	3699.3	3231.1	2801.1	2399.2	2095.8	1818.5
37.5°	6612.8	5951.8	5252.5	4585.4	3960.5	3373.7	2825.2	2351.0	1896.8	1603.5	1366.4
40°	6841.9	5977.9	5127.9	4346.3	3618.9	2933.7	2326.9	1796.4	1436.7	1169.5	1010.7
42.5°	6984.6	5927.6	4927.0	4018.7	3158.7	2381.1	1746.1	1288.0	1020.8	872.1	811.8
45°	7064.9	5797.0	4629.6	3570.7	2602.1	1810.4	1239.8	930.3	785.7	733.4	713.3
47.5°	7060.9	5586.1	4257.9	3052.2	1987.3	1261.9	878.1	725.4	685.2	669.1	665.1
50°	7018.7	5326.8	3821.8	2489.6	1434.7	880.1	695.2	651.0	641.0	630.9	626.9
52.5°	6960.5	5005.3	3339.6	1941.1	1018.8	703.3	630.9	618.9	610.8	600.8	596.8
55°	6852.0	4609.5	2817.1	1460.8	797.7	635.0	608.8	604.8	594.8	580.7	572.7
57.5°	6719.3	4207.6	2316.8	1141.3	705.3	618.9	604.8	598.8	584.7	568.7	552.6
60°	6671.1	3876.1	1925.0	962.5	683.2	624.9	614.9	606.8	586.7	562.6	544.5
62.5°	6369.7	3502.3	1643.7	892.2	695.2	651.0	647.0	635.0	604.8	576.7	548.6
65°	5590.1	2961.8	1392.5	843.9	719.4	695.2	699.3	681.2	651.0	612.9	562.6
67°	4728.0	2415.3	1159.4	797.7	737.4	741.5	755.5	741.5	703.3	649.0	580.7
67.5°	4499.0	2276.6	1101.1	783.7	741.5	753.5	769.6	759.5	721.4	659.1	588.7
70°	3343.6	1603.5	821.8	709.3	741.5	789.7	825.9	835.9	793.7	707.3	604.8
72.5°	2355.0	1034.8	630.9	614.9	673.1	737.4	805.8	839.9	791.7	697.3	582.7
75°	1414.6	647.0	512.4	522.4	566.6	633.0	687.2	701.3	641.0	580.7	504.4
77.5°	655.1	430.0	401.9	415.9	458.1	488.3	488.3	460.1	413.9	377.8	361.7
80°	385.8	351.6	349.6	375.8	403.9	381.8	347.6	309.4	285.3	273.3	267.2
82.5°	361.7	375.8	399.9	405.9	383.8	329.5	287.3	249.2	237.1	231.1	225.0
85°	426.0	456.1	415.9	383.8	339.6	277.3	225.0	192.9	186.9	180.8	172.8
87.5°	393.8	375.8	327.5	281.3	233.1	168.8	122.6	110.5	118.6	116.5	112.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P158509

CATALOG NUMBER: VST-E11-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	160°	165°	170°	175°	180°
0°	3285.3	3285.3	3285.3	3285.3	3285.3
2.5°	3198.9	3198.9	3190.9	3186.9	3196.9
5°	3142.7	3144.7	3138.6	3136.6	3138.6
7.5°	3130.6	3128.6	3124.6	3120.6	3124.6
10°	3166.8	3164.8	3158.7	3162.7	3156.7
12.5°	3275.3	3287.3	3285.3	3289.3	3297.4
15°	3452.1	3450.1	3444.1	3448.1	3454.1
17.5°	3552.6	3536.5	3522.4	3516.4	3516.4
20°	3528.5	3482.2	3458.1	3444.1	3440.0
22.5°	3385.8	3319.5	3269.2	3257.2	3247.1
25°	3152.7	3070.3	3006.0	2992.0	2965.8
27.5°	2881.4	2770.9	2694.6	2678.5	2664.4
30°	2525.8	2399.2	2310.8	2254.5	2272.6
32.5°	2091.8	1971.2	1868.7	1778.3	1764.2
35°	1615.5	1482.9	1392.5	1352.3	1326.2
37.5°	1205.6	1095.1	1034.8	996.6	998.7
40°	922.3	864.0	831.9	805.8	807.8
42.5°	769.6	743.5	735.4	723.4	717.3
45°	697.3	689.2	691.2	679.2	675.1
47.5°	657.1	651.0	653.0	645.0	643.0
50°	624.9	620.9	622.9	616.9	614.9
52.5°	592.8	594.8	592.8	588.7	588.7
55°	564.6	562.6	566.6	560.6	560.6
57.5°	542.5	540.5	540.5	538.5	538.5
60°	530.5	522.4	520.4	520.4	522.4
62.5°	524.4	510.4	508.4	508.4	510.4
65°	526.5	504.4	496.3	494.3	492.3
67°	528.5	496.3	480.2	472.2	470.2
67.5°	530.5	492.3	474.2	466.2	462.2
70°	518.4	464.2	438.0	424.0	420.0
72.5°	488.3	430.0	397.9	379.8	375.8
75°	434.0	389.8	361.7	341.6	333.6
77.5°	335.6	315.5	305.4	293.4	289.3
80°	261.2	251.2	247.2	239.1	237.1
82.5°	217.0	207.0	200.9	190.9	184.9
85°	168.8	156.7	152.7	144.7	140.7
87.5°	110.5	104.5	102.5	92.4	88.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)